

## PROPOSAL SUMMARY AND ROUTING FORM

**Proposal Title:** Add English 311, Remove WIC and Delete STQM 260

**Initiating Unit or Individual:** Construction Technology and Management Department

**Contact Person's Name:** Edward Brayton e-mail: braytone@ferris.edu phone: 591-2370

**Date or Semester of Proposal Implementation:** \_\_\_\_\_

- Group I - A – New degree/major or major, or redirection of a current offering
- Group I - B – New minors or concentrations
- Group II - A – Minor curriculum clean-up and course changes
- Group II - B – New Course
- Group III - Certificates
- Group IV – Off-Campus Programs

Group/Individual	Signature	Date	Vote/Action *
Program Faculty			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Department Faculty	<i>Robert Costey</i>		<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Department Head / Chair	<i>Edward Brayton</i>	3/18/08	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
College Curriculum Committee	<i>Ron McKean</i>	4/15/08	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Dean	<i>John E. [Signature]</i>	4/17/08	<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
University Curriculum Committee	<i>[Signature]</i>	11/20/08	<input checked="" type="checkbox"/> Support 6-0 <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Senate	<i>Richard Duffin/pt</i>	11/20/08	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Academic Affairs	<i>Daniel Fleckner</i>	11/21/08	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support

\* Support with Concerns or Not Support must include a list of concerns.

<b>To be completed by Academic Affairs</b>		
_____ President (Date Approved)	_____ Board of Trustees (Date Approved)	_____ President's Council (Date Approved)

REC'D NOV 20 2008

## FORM A CONT.

### 1. Proposal Summary

The construction faculty are more comfortable with teaching construction content than teaching technical writing principles. Also, we feel that the English professors are better qualified to teach technical writing skills and we feel that our class time would be better spent without the Writing Intensive designation. Therefore, this proposal is to add English 311 Advanced Technical Writing to the Construction Management curriculum, remove the Writing Intensive Course (WIC) designations from the three Construction Management courses CONM 412, CONM 422 and CONM 423. Hence, we will delete STQM 260 so that the total credit hours will remain the same.

### 2. Summary of All Course Action Required\*

#### a. Newly Created Courses to FSU:

Prefix	Number	Title
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#### b. Courses to be Deleted From FSU Catalog:

Prefix	Number	Title
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#### c. Existing Course(s) to be Modified:

Prefix	Number	Title
CONM	412	Construction Contracts
CONM	422	Construction Supervision and Safety
CONM	423	Const. Management Professional Practices

#### d. Addition of existing FSU courses to program

Prefix	Number	Title
ENGL	311	Advanced Technical Writing

#### e. Removal of existing FSU courses from program

Prefix	Number	Title
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**STQM**

**260**

**Introduction to Statistics**

\*Contact Senate Secretary or UCC Chair if spaces for additional courses are needed.

## CURRICULUM CONSULTATION FORM

To be completed by each department affected by the proposed change, new degree, new program, new minor, or new course. Potential duplication of coursework is reason for consultation.

1. This form, with the first six blanks filled in, should be forwarded with the proposal to the chair/head of the affected department.
2. The affected department must respond within 20 calendar days of receipt of this form to insure inclusion in the final proposal. The completed form is returned to the initiator and inserted into the proposal. Failure to respond is interpreted as support for the proposal.
3. The Proposing Department must respond to any concerns by the affected department. This response will be in writing and be included in the proposal following the consultation form.

**RE: Proposal Title** Add English 311, Remove WIC and Delete STQM 260

**Initiator(s):** Construction Technology and Management Department

**Proposal Contact:** Edward Brayton **Date Sent:** March 14, 2008

**Department:** Construction Technology and Management **Campus Address:** Granger 227 (GRN 227)  
(Please print)

**Responding Department :** English

**Chair/Head/Coordinator:** Genevieve West **Date Returned:** \_\_\_\_\_

Based upon department faculty review on \_\_\_\_\_(date), we

- Support the above proposal.
- Support the above proposal with the modifications and concerns listed below.
- Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

## CURRICULUM CONSULTATION FORM

To be completed by each department affected by the proposed change, new degree, new program, new minor, or new course. Potential duplication of coursework is reason for consultation.

1. This form, with the first six blanks filled in, should be forwarded with the proposal to the chair/head of the affected department.
2. The affected department must respond within 20 calendar days of receipt of this form to insure inclusion in the final proposal. The completed form is returned to the initiator and inserted into the proposal. Failure to respond is interpreted as support for the proposal.
3. The Proposing Department must respond to any concerns by the affected department. This response will be in writing and be included in the proposal following the consultation form.

**RE: Proposal Title** Add English 311, Remove WIC and Delete STQM 260

**Initiator(s):** Construction Technology and Management Department

**Proposal Contact:** Edward Brayton **Date Sent:** March 14, 2008

**Department:** Construction Technology and Management **Campus Address:** Granger 227 (GRN 227)  
(Please print)

**Responding Department :** Marketing Department

**Chair/Head/Coordinator:** Michael Cooper **Date Returned:** \_\_\_\_\_

Based upon department faculty review on \_\_\_\_\_ (date), we

- Support the above proposal.
- Support the above proposal with the modifications and concerns listed below.
- Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

FORM D – CURRENT CHECKSHEET

BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT  
with an Emphasis from Building Construction Technology or Civil Engineering Technology

**Apply for Entry into the Bachelor of Science Degree In Construction Management.**

I have passed Ferris’ Math 120 or its equivalent with a C- or better. Also, I have a 2.30 GPA or above. I have completed all of my CONM & BCTM 100 and 200 level courses for entry into the Construction Management Bachelor degree program prior to taking any CONM 300 or 400 level courses. Finally, I have applied and I have a letter of approval from the construction department that I have been accepted into the program.

**THIRD YEAR - FALL SEMESTER**

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	311	Formwork and Temporary Structures	CONM 221	3
CONM	312	Construction Scheduling	CONM 222	3
ACCT	221	Principles of Construction Accounting	MATH 115	3
STQM	260	Introduction to Statistics		3
MATH	132	Calculus for Business	MATH 120	3
THIRD YEAR - FALL SEMESTER CREDIT HOURS				15

**THIRD YEAR - WINTER SEMESTER**

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	321	Construction Cost Estimating	CONM 211	3
CONM	324	Adv. Const. Computer Techniques	ISYS 105	3
BLAW	301	Legal Environment of Business		3
ECON	221	Economics		3
LAB/S	Choose One Laboratory Science from either, Chemistry, Geology, Physics or Environmental Science			
CHEM				
GEOL				
PHYS				
ENSCI				
THIRD YEAR - WINTER SEMESTER CREDIT HOURS				15/16

**BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT**  
with Emphasis from Building Construction Technology or Civil Engineering Technology

**FOURTH YEAR - FALL SEMESTER**

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	412	Construction Contracts (WIC)	ENGL 211 or 250, CONM 222	3
CONM	413	Construction Economics	MATH 120	3
CONM	423	Construction Management Professional Methods (WIC)	ENGL 211 or 250, CONM 222	3
MGMT	300 +	Elective 300 or Above		3
C.E.	200	Cultural Enrichment Elective (200+)		3
COMM	121	Fundamentals of Public Speaking		3
FOURTH YEAR - FALL SEMESTER CREDIT HOURS				18

**FOURTH YEAR - WINTER SEMESTER**

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	422	Construction Supervision & Safety (WIC)	ENGL 211 or 250, CONM 222	3
CONM	499	Const Project Management	CONM 311, 312, CONM 321, 324	3
MKTG	321	Principles of Marketing		3
* C.E.		Cultural Enrichment Elective		3
* SA		Social Awareness Elective		3
FOURTH YEAR - WINTER SEMESTER CREDIT HOURS				15
CONM 300 & 400 LEVEL COURSES TOTAL CREDIT HOURS				63/64
B.S. CONSTRUCTION MANAGEMENT FROM BCTM TOTAL CREDIT HOURS				126/127
B.S. CONSTRUCTION MANAGEMENT FROM CETM TOTAL CREDIT HOURS				126/127

\* Note: Students must complete 40 credits at or above the 300 level in bachelors programs.  
A 300 level Social Awareness or Cultural Enrichment will fulfill this requirement.

FORM D – PROPOSED CHECKSHEET

BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT  
with an Emphasis from Building Construction Technology or Civil Engineering Technology

**Apply for Entry into the Bachelor of Science Degree In Construction Management.**

I have passed Ferris’ Math 120 or its equivalent with a C- or better. Also, I have a 2.30 GPA or above. I have completed all of my CONM & BCTM 100 and 200 level courses for entry into the Construction Management Bachelor degree program prior to taking any CONM 300 or 400 level courses. Finally, I have applied and I have a letter of approval from the construction department that I have been accepted into the program.

THIRD YEAR - FALL SEMESTER

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	311	Formwork and Temporary Structures	CONM 221	3
CONM	312	Construction Scheduling	CONM 222	3
ACCT	221	Principles of Construction Accounting	MATH 115	3
ENGL	311	Advanced Technical Writing	ENGL 211 or ENGL 250	3
MATH	132	Calculus for Business	MATH 120	3
THIRD YEAR - FALL SEMESTER CREDIT HOURS				15

THIRD YEAR - WINTER SEMESTER

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	321	Construction Cost Estimating	CONM 211	3
CONM	324	Adv. Const. Computer Techniques	ISYS 105	3
BLAW	301	Legal Environment of Business		3
ECON	221	Economics		3
LAB/S	Choose One Laboratory Science from either, Chemistry, Geology, Physics or Environmental Science			
CHEM				
GEOL				
PHYS				
ENSCI				
THIRD YEAR - WINTER SEMESTER CREDIT HOURS				15/16

**BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT**  
with Emphasis from Building Construction Technology or Civil Engineering Technology

**FOURTH YEAR - FALL SEMESTER**

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	412	Construction Contracts	CONM 222, ENGL 311, MATH 120	3
CONM	413	Construction Economics	MATH 120	3
CONM	423	Construction Management Professional Methods	CONM 222, ENGL 311, MATH 120	3
MGMT	300+	Elective 300 or Above		3
C.E.	200+	Cultural Enrichment Elective (200+)		3
COMM	121	Fundamentals of Public Speaking		3
<b>FOURTH YEAR - FALL SEMESTER CREDIT HOURS</b>				<b>18</b>

**FOURTH YEAR - WINTER SEMESTER**

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	422	Construction Supervision/ Safety	CONM 222, ENGL 311, MATH 120	3
CONM	499	Const Project Management	CONM 311, 312, 321, 324	3
MKTG	321	Principles of Marketing		3
C.E.		Cultural Enrichment Elective		3
SA		Social Awareness Elective		3
<b>FOURTH YEAR - WINTER SEMESTER CREDIT HOURS</b>				<b>15</b>
<b>CONM 300 &amp; 400 LEVEL COURSES TOTAL CREDIT HOURS</b>				<b>63/64</b>
<b>B.S. CONSTRUCTION MANAGEMENT FROM BCTM TOTAL CREDIT HOURS</b>				<b>126/127</b>
<b>B.S. CONSTRUCTION MANAGEMENT FROM CETM TOTAL CREDIT HOURS</b>				<b>126/127</b>

FORM D CURRENT CHECKSHEET FROM AT

TRANSFER ENTRY INTO CONSTRUCTION MANAGEMENT  
FROM FERRIS' ARCHITECTURAL TECHNOLOGY DEGREE (AAS)

PREREQUISITE TO ENTERING THE SECOND YEAR CONSTRUCTION COURSES

THIRD YEAR - FALL SEMESTER

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
MATH	126	Algebra and Analytic Trigonometry	MATH 116 C- or +	4
CONM	122	Construction Surveying and Layout	MATH 116 C- or +	3
CONM	211	Construction Estimating	CONM 111, 112, MATH 126	3
CONM	212	Soil & Foundations	CONM 121, MATH 126	3
CONM	222	Construction Administration	CONM 111, 112, MATH 126	3
				16

**Apply for Entry into the Bachelor of Science Degree in Construction Management**

I have passed Ferris' Math 120 or Math 126 or its equivalent with a C- or better. Also, I have completed all of my CONM 100 and 200 level courses for entry into the Construction Management Bachelor degree program prior to taking any CONM 300 or 400 level courses.

THIRD YEAR - WINTER SEMESTER

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	312	Construction Scheduling	CONM 222	3
CONM	321	Construction Cost Estimating	CONM 211	3
CONM	324	Adv. Const. Computer Techniques	ISYS 105	3
ACCT	221	Principles of Construction Accounting		3
LAB/S	Choose One Laboratory Science from either Chemistry, Geology, Physics or Environmental Science			
CHEM				
GEOL				
PHYS				
ENSCI				
				15/17

FORM D CURRENT CHECKSHEET FROM AT  
FROM FERRIS' ARCHITECTURAL TECHNOLOGY DEGREE (AAS)

**FOURTH YEAR - FALL SEMESTER**

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	311	Formwork and Temporary Structures	CONM 221	3
CONM	413	Construction Economics	MATH 120	3
CONM	423	Construction Management Professional Methods WIC	ENGL 211 or 250, CONM 222	3
STQM	260	Introduction to Statistics	MATH 115	3
MATH	132	Calculus for Business	MATH 120 C- or +	3
				15

**FOURTH YEAR - WINTER SEMESTER**

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	412	Construction Contracts (WIC)	ENGL 211/250	3
MGMT	300 +	Elective 300 or Above		3
BLAW	301	Legal Environment of Business		3
MKTG	321	Principles of Marketing		3
C.E.		Cultural Enrichment Elective		3
				15

**FIFTH YEAR - FALL SEMESTER**

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	422	Construction Supervision & Safety (WIC)	CONM 222, ENGL 211/250	3
CONM	499	Construction Project Management	CONM 312, 321, 324	3
C.E.	200+	Cultural Enrichment Elective (200+)		3
SA		Social Awareness Elective		3
ECON	221	Principles of Economics 1		3
				15

Note: Students must complete 40 credits at or above the 300 level in bachelors programs.  
A 300 level Social Awareness or Cultural Enrichment will fulfill this requirement.

FORM D PROPOSED CHECKSHEET FROM AT

TRANSFER ENTRY INTO CONSTRUCTION MANAGEMENT  
FROM FERRIS' ARCHITECTURAL TECHNOLOGY DEGREE (AAS)

PREREQUISITE TO ENTERING THE SECOND YEAR CONSTRUCTION COURSES

THIRD YEAR - FALL SEMESTER

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
MATH	126	Algebra and Analytic Trigonometry	MATH 116 C- or +	4
CONM	122	Construction Surveying and Layout	MATH 116 C- or +	3
CONM	211	Construction Estimating	CONM 111, 112, MATH 126	3
CONM	212	Soil & Foundations	CONM 121, MATH 126	3
CONM	222	Construction Administration	CONM 111, 112, MATH 126	3
				16

**Apply for Entry into the Bachelor of Science Degree in Construction Management**

I have passed Ferris' Math 120 or Math 126 or its equivalent with a C- or better. Also, I have completed all of my CONM 100 and 200 level courses for entry into the Construction Management Bachelor degree program prior to taking any CONM 300 or 400 level courses.

THIRD YEAR - WINTER SEMESTER

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	311	Formwork and Temporary Structures	CONM 221	3
CONM	312	Construction Scheduling	CONM 222	3
CONM	321	Construction Cost Estimating	CONM 211	3
CONM	324	Adv. Const. Computer Techniques	ISYS 105	3
ENGL	311	Advanced Technical Writing	ENGL 211 or 250	3
				15

FORM D PROPOSED CHECKSHEET FROM AT  
FROM FERRIS' ARCHITECTURAL TECHNOLOGY DEGREE (AAS)

FOURTH YEAR - FALL SEMESTER

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	413	Construction Economics	MATH 120	3
CONM	423	Construction Management Professional Methods	CONM 222, ENGL 311, MATH 120	3
ACCT	221	Principles of Construction Accounting		3
MATH	132	Calculus for Business	MATH 120 C- or +	3
LAB/S	Choose One Laboratory Science from either Chemistry, Geology, Physics or Environmental Science			
				15/17

FOURTH YEAR - WINTER SEMESTER

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	412	Construction Contracts	CONM 222, ENGL 311, MATH 120	3
MGMT	300+	Elective 300 or Above		3
BLAW	301	Legal Environment of Business		3
MKTG	321	Principles of Marketing		3
C.E.		Cultural Enrichment Elective		3
				15

FIFTH YEAR - FALL SEMESTER

ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
CONM	422	Construction Supervision & Safety	CONM 222, ENGL 311, MATH 120	3
CONM	499	Construction Project Management	CONM 312, 321, 324	3
C.E.	200+	Cultural Enrichment Elective (200+)		3
SA		Social Awareness Elective		3
ECON	221	Principles of Economics 1		3
				15

# MODIFY COURSE

## Course Date Entry Form

FORM F  
Modify Course  
rev. 2/14/05

### I. ACTION TO BE TAKEN: MODIFY AN EXISTING COURSE

Notes:

1. Complete all parts of sections I and II; complete only those items in section III that represent changes.
2. If either prefix or number are being changed, use 'Delete Course' and 'New Course' forms rather than this form.

a. List the changes to be made: Remove WIC Designation and change the prerequisite

b. Term Effective: Semester  Fall Year 2008 See instructions.

### II. CURRENT: Include information that is in the current course database.

a. Course Prefix conm      b. Number 412      c. Enter Contact Hours per week in boxes or check Independent Study (X).  
 LECTure  hr/week    LAB  hr/week    INDEpendent Study   
 Practicum:  hr/week    Seminar:  hr/week

d. Full Course Title: Construction Contracts

### III. PROPOSED CHANGES: Complete only those boxes that represent proposed changes in the course. Leave all other spaces blank.

a. Course Prefix       b. Number       c. Enter Contact Hours per week in boxes or check Independent Study (X).  
 LECTure  hr/week    LAB  hr/week    INDEpendent Study   
 Practicum:  hr/semester    Seminar:  hr/week

d. Full Course Title:

e. Abbreviated Course Title: . (Abbreviate only if necessary. Use Arabic numerals. Limit to 26 characters and spaces.)

f. Semester(s) Offered:  (See instructions for listing.)    g. Max. Section Enrollment:

Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

h. Type:  Variable  Fixed      i. Maximum Credit Hours     j. Minimum Credit Hours

k. Grade Method: Check (x)  Normal Grading     Credit/No Credit only (Pass/Fail)

m. May Be Repeated for Added Credit: Check (x)  Yes     No


n. Levels: Check (x)  Undergraduate  Graduate  Professional

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

Legal principles used to avoid or resolve construction misunderstandings or disputes. Basic principles involved in both private and public construction, the contractual relationships and writing effective documents.

p. Prerequisites: (if no prerequisites, write "None") Limited to 60 spaces. CONM 222, ENGL 311, MATH 120 with a grade of C- or better.

UCO Chair Signature/Date:

 11, 20, 08

Academic Affairs Approval Signature/Date:

 11/24/08

To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code

Basic Skill (BS)  General Education (GE)  Occupational Education (OC)  G.E. Codes

### Office of the Registrar use ONLY

Date Received: \_\_\_\_\_ Date Completed: \_\_\_\_\_ Entered: SIS [125 \_\_\_ 1D4 \_\_\_ 12R \_\_\_ 131 \_\_\_]

FERRIS STATE UNIVERSITY  
COLLEGE OF TECHNOLOGY  
CONSTRUCTION DEPARTMENT

COURSE: CONM 412  
DATE: AUGUST 2005

COURSE OUTLINE

COURSE TITLE: Construction Contracts

DESCRIPTION: Legal principles used to avoid or resolve construction misunderstandings or disputes. Basic principles involved in both private and public construction, the contractual relationships and writing effective contract documents. This course meets General Education requirement: Writing Intensive.

CREDIT HOURS: Three semester hours

CONTACT HOURS: Lecture - Three hours per week

PREREQUISITE: CONM 222, ENGL 211, MATH 120 with a grade of C- or better.

TEXTBOOK: Brayton, Edward M. (Winter 2005). *CONM 412 Construction Contracts Study Guide*. Big Rapids, MI: Ferris Book Store.

White, Nancy J. (2002). *Principles and Practices of Construction Law*. Upper Saddle River, NJ: Prentice Hall.

Progressive Architecture and Engineering. (Fall 2001). *Specifications for the Southwest Barry County Sewage Disposal System*.

STUDENT LEARNING OUTCOMES:

The Student will be able to: Search all documents for pertinent clauses for some cases and establish an effective plan of action to avoid this legal battle. Write and Present a paper on a specific contract topic. Breakdown the Specifications into specific trade packages for the bid Division Index, compile the Bid Division Scope for each trade and create Bid Proposal Forms. Evaluate the total contract for the total amount of risk involved. Distinguish varying amounts of risk involved in each clause. Compose a unique Subcontract Agreement.

CONM 412 - FORM F – CURRENT OUTLINE

STUDENT INSTRUCTIONAL UNIT DESCRIPTION AND TIME ALLOCATIONS

	UNIT TOPIC DESCRIPTION SUMMARY	TIME LECTURE
I.	Introduction, Research Topics & Procedures	1
II.	Oral Written Communication Assignments	1
III.	Construction & Contract Documents	3
IV.	Contract Formation & Interpretation Principles	3
V.	Types of Contracts	3
VI.	Bidding Principles	3
VII.	Types of Specifications	2
VIII.	Subcontract Bid Scope, Proposal, Agreement	3
IX.	Scheduling and Trade Coordination	3
X.	Progress Payments, Lien Law, Project Closeout	3
XI.	Claims, Differing Site Conditions, Changes	3
XII.	Delays and Claims Costs Methods	3
XIII.	Types of Insurance	3
XIV.	Safety Liability and Tort Law	3
XV.	Employment Law and Construction Law	3
XVI.	Evaluation Time	5
	Final Examination - Insurance, Torts & Employment Law	
	Total Hours	45

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT Upon completion of each instructional unit the learner will be able to:	
I.	<p>Introduction, Research Topics &amp; Procedures</p> <ul style="list-style-type: none"> <li>A. Discuss the course objectives.</li> <li>B. Explain the requirements for the research paper.</li> <li>C. Discuss the case critique procedures</li> </ul>
II.	<p>Oral Written Communication Assignments</p> <ul style="list-style-type: none"> <li>A. Write a Resume.</li> <li>B. Complete the Research Evaluation Assignment.</li> <li>C. Write a ten page research paper on an assigned topic.</li> <li>D. Write four - three page Case critiques on assigned topics.</li> <li>E. Prepare speech Outline &amp; Overheads for Group Presentation.</li> <li>F. Present your topic to the class with recommendations.</li> <li>G. Write a ten page Subcontract Agreement.</li> </ul>
III.	<p>Construction &amp; Contract Documents</p> <ul style="list-style-type: none"> <li>A. Search the documents for specific clauses.</li> <li>B. Discuss standardized and non standardized documents.</li> <li>C. Discuss the contract law system.</li> </ul>
IV.	<p>Contract Formation &amp; Interpretation Principles</p> <ul style="list-style-type: none"> <li>A. Explain the formation principles in construction.</li> <li>B. Compare Contract and Subcontract Formation Principles.</li> <li>C. Outline the Contract interpretation principles</li> </ul>

	STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT Upon completion of each instructional unit the learner will be able to:
V.	<p>Types of Contracts</p> <ul style="list-style-type: none"> <li>A. Discuss the types of contracts.</li> <li>B. Contrast the differences in delivery modes.</li> <li>C. Debate the advantages of Design/Build vs CM.</li> <li>D. Describe the Phases in a CM Agreement.</li> </ul>
VI.	<p>Bidding Principles</p> <ul style="list-style-type: none"> <li>A. Compare Bidding Requirements on Public and Private.</li> <li>B. Describe the evidence required to prove a Bid Mistake.</li> <li>C. List the documentation required for a pre-bid inspection.</li> <li>D. Describe Flow Down Clause Principles.</li> </ul>
VII.	<p>Types of Specifications</p> <ul style="list-style-type: none"> <li>A. Analyze various Types of Specifications for Risk.</li> <li>B. Distinguish a Methods Spec. from an End Result Spec.</li> </ul>
VIII.	<p>Subcontract Bid Scope, Proposal, Agreement</p> <ul style="list-style-type: none"> <li>A. Describe the principles for writing a Bid Scope.</li> <li>B. Breakdown the Specs into trade packages for the Bid Index.</li> <li>C. Write the Bid Division Scope for each trade.</li> <li>D. Write Bid Proposal Forms for each trade.</li> </ul>
IX.	<p>Scheduling and Trade Coordination</p> <ul style="list-style-type: none"> <li>A. Identify the Contractors Trade Coordination Responsibilities.</li> <li>B. Determine the Contractors Duties for Work by Separate parties.</li> </ul>

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT Upon completion of each instructional unit the learner will be able to:	
X.	<p>Progress Payments, Lien Law, Project Closeout</p> <ul style="list-style-type: none"> <li>A. Describe a Schedule of values.</li> <li>B. Define Retainage and Liquidated Damages.</li> <li>C. Discuss Project closeout Procedures.</li> </ul>
XI.	<p>Claims, Differing Site Conditions, Changes, Delays</p> <ul style="list-style-type: none"> <li>A. Compare differences between a Type I and Type II clause.</li> <li>B. Classify the types of delays.</li> <li>C. Discuss the Arbitration and ADR Process.</li> </ul>
XII.	<p>Delays and Claims Costs Methods</p> <ul style="list-style-type: none"> <li>A. Discuss the Eichleay Formula for recovering overhead costs.</li> <li>B. Describe the other claims cost calculation methods.</li> </ul>
XIII.	<p>Types of Insurance and Bonds</p> <ul style="list-style-type: none"> <li>A. Describe the various forms of Insurance required.</li> <li>B. Develop a plan for Insurance and self insurance.</li> <li>C. Distinguish Broad Form and Limited Form Indemnification.</li> </ul>
XIV.	<p>Safety Liability and Tort Law</p> <ul style="list-style-type: none"> <li>A. Discuss the safety liability, Tort law and Due Diligence.</li> </ul>
XV.	<p>Employment Law and Construction Law</p> <ul style="list-style-type: none"> <li>A. Describe the content of the Labor Law Acts.</li> <li>B. Define the Supervisors responsibilities under EEO.</li> </ul>
XVI.	Evaluation Time

FORM F - PROPOSED OUTLINE

FERRIS STATE UNIVERSITY  
COLLEGE OF TECHNOLOGY  
CONSTRUCTION DEPARTMENT

COURSE: CONM 412  
DATE: MARCH 20, 2008

COURSE OUTLINE

COURSE TITLE: Construction Contracts

DESCRIPTION: Legal principles used to avoid or resolve construction misunderstandings or disputes. Basic principles involved in both private and public construction, the contractual relationships and writing effective contract documents.

CREDIT HOURS: Three semester hours

CONTACT HOURS: Lecture - Three hours per week

PREREQUISITE: CONM 222, ENGL 311, MATH 120 with a grade of C- or better.

TEXTBOOK: Brayton, Edward M. (Winter 2005). *CONM 412 Construction Contracts Study Guide*. Big Rapids, MI: Ferris Book Store.

White, Nancy J. (2002). *Principles and Practices of Construction Law*. Upper Saddle River, NJ: Prentice Hall.

Progressive Architecture and Engineering. (Fall 2001). *Specifications for the Southwest Barry County Sewage Disposal System*.

STUDENT LEARNING OUTCOMES:

The Student will be able to: Search all documents for pertinent clauses for some cases and establish an effective plan of action to avoid this legal battle. Write and Present a paper on a specific contract topic. Breakdown the Specifications into specific trade packages for the bid Division Index, compile the Bid Division Scope for each trade and create Bid Proposal Forms. Evaluate the total contract for the total amount of risk involved. Distinguish varying amounts of risk involved in each clause. Compose a unique Subcontract Agreement.

CONM 412 - FORM F - PROPOSED OUTLINE

STUDENT INSTRUCTIONAL UNIT DESCRIPTION AND TIME ALLOCATIONS

	UNIT TOPIC DESCRIPTION SUMMARY	TIME LECTURE
I.	Introduction, Research Topics & Procedures	1
II.	Oral Written Communication Assignments	1
III.	Construction & Contract Documents	3
IV.	Contract Formation & Interpretation Principles	3
V.	Types of Contracts	3
VI.	Bidding Principles	3
VII.	Types of Specifications	2
VIII.	Subcontract Bid Scope, Proposal, Agreement	3
IX.	Scheduling and Trade Coordination	3
X.	Progress Payments, Lien Law, Project Closeout	3
XI.	Claims, Differing Site Conditions, Changes	3
XII.	Delays and Claims Costs Methods	3
XIII.	Types of Insurance	3
XIV.	Safety Liability and Tort Law	3
XV.	Employment Law and Construction Law	3
XVI.	Evaluation Time	5
	Final Examination - Insurance, Torts & Employment Law	
	Total Hours	45

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT Upon completion of each instructional unit the learner will be able to:	
I.	<p>Introduction, Research Topics &amp; Procedures</p> <ul style="list-style-type: none"> <li>A. Discuss the course objectives.</li> <li>B. Explain the requirements for the research paper.</li> <li>C. Discuss the case critique procedures</li> </ul>
II.	<p>Oral and Written Communication Assignments</p> <ul style="list-style-type: none"> <li>A. Write a Resume.</li> <li>B. Complete the Research Evaluation Assignments for the Political Paper and the Contracts Paper.</li> <li>C. Write a five page Political Engagement Paper</li> <li>D. Write a six page research paper on an assigned contract topic.</li> <li>E. Write two - three page Case critiques on assigned topics.</li> <li>F. Prepare speech Outline &amp; Overheads for Group Presentation on the Contracts Paper.</li> <li>G. Present your topic to the class with recommendations.</li> <li>H. Write a Subcontract Agreement.</li> </ul>
III.	<p>Construction &amp; Contract Documents</p> <ul style="list-style-type: none"> <li>A. Search the documents for specific clauses.</li> <li>B. Discuss standardized and non standardized documents.</li> <li>C. Discuss the contract law system.</li> </ul>
IV.	<p>Contract Formation &amp; Interpretation Principles</p> <ul style="list-style-type: none"> <li>A. Explain the formation principles in construction.</li> <li>B. Compare Contract and Subcontract Formation Principles.</li> <li>C. Outline the Contract interpretation principles</li> </ul>

	STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT Upon completion of each instructional unit the learner will be able to:
V.	<p>Types of Contracts</p> <ul style="list-style-type: none"> <li>A. Discuss the types of contracts.</li> <li>B. Contrast the differences in delivery modes.</li> <li>C. Debate the advantages of Design/Build vs CM.</li> <li>D. Describe the Phases in a CM Agreement.</li> </ul>
VI.	<p>Bidding Principles</p> <ul style="list-style-type: none"> <li>A. Compare Bidding Requirements on Public and Private.</li> <li>B. Describe the evidence required to prove a Bid Mistake.</li> <li>C. List the documentation required for a pre-bid inspection.</li> <li>D. Describe Flow Down Clause Principles.</li> </ul>
VII.	<p>Types of Specifications</p> <ul style="list-style-type: none"> <li>A. Analyze various Types of Specifications for Risk.</li> <li>B. Distinguish a Methods Spec. from an End Result Spec.</li> </ul>
VIII.	<p>Subcontract Bid Scope, Proposal, Agreement</p> <ul style="list-style-type: none"> <li>A. Describe the principles for writing a Bid Scope.</li> <li>B. Breakdown the Specs into trade packages for the Bid Index.</li> <li>C. Write the Bid Division Scope for each trade.</li> <li>D. Write Bid Proposal Forms for each trade.</li> </ul>
IX.	<p>Scheduling and Trade Coordination</p> <ul style="list-style-type: none"> <li>A. Identify the Contractors Trade Coordination Responsibilities.</li> <li>B. Determine the Contractors Duties for Work by Separate parties.</li> </ul>

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT Upon completion of each instructional unit the learner will be able to:	
X.	<p>Progress Payments, Lien Law, Project Closeout</p> <ul style="list-style-type: none"> <li>A. Describe a Schedule of values.</li> <li>B. Define Retainage and Liquidated Damages.</li> <li>C. Discuss Project closeout Procedures.</li> </ul>
XI.	<p>Claims, Differing Site Conditions, Changes, Delays</p> <ul style="list-style-type: none"> <li>A. Compare differences between a Type I and Type II clause.</li> <li>B. Classify the types of delays.</li> <li>C. Discuss the Arbitration and ADR Process.</li> </ul>
XII.	<p>Delays and Claims Costs Methods</p> <ul style="list-style-type: none"> <li>A. Discuss the Eichleay Formula for recovering overhead costs.</li> <li>B. Describe the other claims cost calculation methods.</li> </ul>
XIII.	<p>Types of Insurance and Bonds</p> <ul style="list-style-type: none"> <li>A. Describe the various forms of Insurance required.</li> <li>B. Develop a plan for Insurance and self insurance.</li> <li>C. Distinguish Broad Form and Limited Form Indemnification.</li> </ul>
XIV.	<p>Safety Liability and Tort Law</p> <ul style="list-style-type: none"> <li>A. Discuss the safety liability, Tort law and Due Diligence.</li> </ul>
XV.	<p>Employment Law and Construction Law</p> <ul style="list-style-type: none"> <li>A. Describe the content of the Labor Law Acts.</li> <li>B. Define the Supervisors responsibilities under EEO.</li> </ul>
XVI.	<p>Evaluation Time</p>

MODIFY COURSE

FORM F
Modify Course
rev. 2/14/05

Course Date Entry Form

I. ACTION TO BE TAKEN: MODIFY AN EXISTING COURSE

Notes:

- 1. Complete all parts of sections I and II; complete only those items in section III that represent changes.
2. If either prefix or number are being changed, use 'Delete Course' and 'New Course' forms rather than this form.

a. List the changes to be made: Remove WIC Designation, change prerequisite and Revised Catalog Description

b. Term Effective: Semester Fall Year 2008 See instructions.

II. CURRENT: Include information that is in the current course database.

a. Course Prefix CONM b. Number 422 c. Enter Contact Hours per week in boxes or check Independent Study (X).
LECTure 2 hr/week LAB 2 hr/week INDEpendent Study
Practicum: hr/week Seminar: hr/week

d. Full Course Title: Construction Supervision and Safety

III. PROPOSED CHANGES: Complete only those boxes that represent proposed changes in the course. Leave all other spaces blank.

a. Course Prefix b. Number c. Enter Contact Hours per week in boxes or check Independent Study (X).
LECTure hr/week LAB hr/week INDEpendent Study
Practicum: hr/semester Seminar: hr/week

d. Full Course Title:

e. Abbreviated Course Title: (Abbreviate only if necessary. Use Arabic numerals. Limit to 26 characters and spaces.)

f. Semester(s) Offered: (See instructions for listing.) g. Max. Section Enrollment:

Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

h. Type: Variable Fixed i. Maximum Credit Hours j. Minimum Credit Hours

k. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. May Be Repeated for Added Credit: Check (x) Yes No

n. Levels: Check (x) Undergraduate Graduate Professional

o. CATALOG DESCRIPTION - Limit to 75 words - PLEASE BE CONCISE.

Project management practices and safety techniques used by construction supervisors to manage people, resources and safety at the construction site. Writing, behavior styles, motivation, listening styles, communication barriers, coaching, time management and meeting skills are stressed. The supervisor's responsibility is to recognize and abate hazards and to provide job instructional training to correct all safety hazards. If the student attends all sessions and completes the safety activities they will earn the OSHA 30 hour Construction Safety Certificate.

p. Prerequisites: (if no prerequisites, write "None") Limited to 60 spaces. CONM 222, ENGL 311, MATH 120 with a C- or better.

UCC Chair Signature/Date:

[Signature] 11/20/08

Academic Affairs Approval Signature/Date:

[Signature] 11/20/08

To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code

Basic Skill (BS) General Education (GE) Occupational Education (OC) G.E. Codes

Office of the Registrar use ONLY

FERRIS STATE UNIVERSITY  
COLLEGE OF TECHNOLOGY  
CONSTRUCTION DEPARTMENT

COURSE: CONM 422  
DATE: SEPT 2005

### COURSE OUTLINE

- COURSE TITLE:** Construction Supervision and Safety
- DESCRIPTION:** Project management practices and safety techniques used by construction supervisors to manage people, resources and safety at the construction site. Writing, behavior styles, motivation, listening styles, communication barriers, coaching, time management and meeting skills are stressed. The supervisor's responsibility to recognize and abate hazards and to provide job instructional training to correct all safety hazards. The student will earn the OSHA 30 hour Construction Safety Certificate. This course fulfills the General Education Requirement: Writing Intensive.
- CREDIT HOURS:** Three semester hours
- CONTACT HOURS:** Lecture - Two hours per week  
Lab - Two hours per week.
- PREREQUISITE:** CONM 222, ENGL 250 or ENGL 211
- TEXTBOOK:** Mangan Communications (Yearly). 29 CFR 1926 OSHA Construction Industry Regulations. Davenport, IA: MANCOMM..
- Brayton, Edward M. (Yearly). *Construction Supervision Instructional Manual*. Big Rapids, MI: Ferris Copy Center.
- OSHA 30-hour Construction Safety*. Brayton, Edward M. (Semester).
- Time Management Profile System, Personal Profile System, Attitudinal Listening Profile System.*

### LEARNING OUTCOMES:

Upon completion you will be able to search the Construction Safety and Health Standards, Identify common causes of accidents and fatalities and be able to determine the abatement techniques to eliminate or reduce the hazard. Also, upon completion you will be able to perform the Human Interaction, Oral and Written Communication functions that the project manager must perform while managing the people within the construction team. Specifically, you will be able to evaluate how you manage your time, write effective meeting agendas and minutes, conduct meetings efficiently, identify your needs driven behavior style, motivate people, listen effectively, communicate, coach people, make effective presentations and train people.

STUDENT INSTRUCTIONAL UNIT DESCRIPTION AND TIME ALLOCATIONS

	UNIT DESCRIPTION	TIME LECTURE	TIME LAB
I.	Intro - Research & Presentation Criteria	1	
II.	Oral/written Communication Assignments	1	
III.	Meetings & Leadership	3	
IV.	Needs Driven Behavior	4	
V.	Motivation & Reinforcement	3	
VI.	Listening Styles	4	
VII.	Communication Barriers	3	
VIII.	Coaching & Counseling Performance	3	
IX.	Time Management	4	
X.	Evaluation Time	4	4
	OSHA Recordkeeping/inspection Procedures		4
	Safety Training Presentations		3
	Safety Observation and Abatement		19
	Final Examination - Coaching		
	Total Hours	30	30

## STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

- I. Introduction - Research & Presentation Criteria
  - A. Review the course objectives, procedures and grading policies.
  - B. Describe the research paper criteria
  - C. Discuss the Safety Research Topic
  - D. Review the Safety Presentation criteria.
  
- II. Oral and Written Communication Assignments
  - A. Write a research paper on an assigned topic.
  - B. Write a Safety Training Preparation Form outline.
  - C. Present the safety topic to the class.
  
- III. Meetings & Leadership
  - A. Describe the leadership skills necessary.
  - B. Identify the components of an effective meeting.
  - C. Identify the components of the minutes.
  
- IV. Needs Driven Behavior
  - A. Describe the attributes of the four Needs driven Behavioral Styles.
  - B. Identify the Fifteen Classical Patterns.
  - C. Associate the Classical Patterns with the Behavioral Styles.
  - D. Describe the Compatibility between Behavioral Styles.

## STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

- V. Motivation and Positive Reinforcement
  - A. Distinguish between motivation and hygiene factors.
  - B. Recognize and provide positive reinforcement.
  - C. List positive and negative conditions to a worker.
  
- VI. Listening Styles
  - A. Name the five listening styles.
  - B. Identify the attributes of each listening style.
  - C. Describe methods to achieve a more balanced listening style.
  
- VII. Communication Barriers
  - A. Identify the types of Communication barriers.
  - B. Review some communication cases and analyze the problems.
  - C. Neutralize listening barriers using the four step process.
  
- VIII. Coaching and Counseling People's Performance
  - A. Identify the Steps within the Performance Analysis Stage.
  - B. Describe the Performance Discussion Steps.
  
- IX. Time Management
  - A. Identify ways in which you use time effectively and ineffectively.
  - B. Analyze and evaluate how you manage your time and time wasters.
  - C. Establish goals, prioritize, plan and schedule daily and weekly.
  - D. Control paperwork, Interruptions, delegation and procrastination.
  
- X. Evaluation Time

## STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

- XI. OSHA Recordkeeping and Inspection Procedures.
  - A. List the required OSHA records that must be maintained.
  - B. Describe the site inspection process.
  - C. Define the types of violations and the penalties.
  - D. Describe the multi-employer jobsite procedures.
  - E. State the most cited physical hazards.
  - F. Describe the most injured worker group.
  
- XII. Safety Training Presentations
  - A. Evaluate Student Safety Presentations.
  
- XIII. Safety Observation and Abatement.
  - A. Recognize and eliminate unsafe acts and conditions.
  - B. Describe the safety observation steps.
  - C. Apply the safety observation system to specific areas.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

1. RECORD KEEPING (29 CFR 1904)
  - A. List the OSHA records that must be maintained.
  - B. Distinguish between a Recordable and Non-Recordable Accident.
  - C. Name the Safety Notices that must be posted at the site.
  
- 2.. INSPECTION PROCEDURES (Subpart B)
  - A. Describe the site inspection process.
  - B. Define the types of violations and the penalty.
  - C. Describe the multi employer jobsite procedures.
  
3. CONSTRUCTION SAFETY STANDARDS/ GENERAL DUTY CLAUSE
  - A. Identify the elements of the General Duty clause.
  - B. Describe the organization of the Safety Standards.
  - C. Find information in the Construction Industry OSHA Standards (CFR 1926)
  
4. SAFETY AND HEALTH PROGRAM REQUIREMENTS (Subpart C)
  - A. Describe the criteria used to evaluate the Contractors Safety Program.
  - B. List the employee training requirements.
  - C. Define the role of the competent person.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

5. HAZARD RECOGNITION AND A SAFETY OBSERVATION SYSTEMS
  - A. Recognize and eliminate unsafe acts and eliminate near misses.
  - B. Describe the steps in the Safety Observation System.
  - C. Apply the Safety Observation System to specific areas.
  
6. HAZARDOUS COMMUNICATION AND HEALTH HAZARDS (Subpart D)
  - A. List typical materials that require an MSDS..
  - B. Search the Data Sheets and find specific information.
  
7. HEALTH HAZARDS (Subpart D)
  - A. List common materials that contain asbestos.
  - B. Describe two ways that asbestos can contaminate a building.
  - C. Describe their actions if they suspect asbestos.
  - D. Determine the Noise Levels of various pieces of equipment.
  - E. Outline the key elements of a quality Hearing Protection program.
  - F. Discuss the health hazards of lead.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

8. PERSONAL AND FALL PROTECTION EQUIPMENT (Subpart E)
  - A. Identify potential fall hazards.
  - B. Determine which product to use for a specific work activity.
  - C. List proper tie off procedures.
  - D. Describe the four functional Product Categories.
  - E. Identify the proper eye protection required for specific situations.
  - F. Identify the proper respiratory equipment required for specific situations.
  
9. FIRE EXTINGUISHERS ( Subpart F)
  - A. List information needed by emergency personnel to effectively respond.
  - B. Operate a fire extinguisher properly.
  - C. Describe the Classification of Fire extinguisher.
  - D. Select the Proper Fire extinguisher for the type of fire.
  
10. MATERIAL STORAGE & Manual Lifting (Subpart H)
  - A. Explain proper storage and stacking procedures.
  - B. List the potential hazards of improperly stored materials.
  - C. List the proper steps for lifting an object.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

11. POWER & HAND TOOLS (Subpart I)

- A. Describe tool inspection precautions you should take.
- B. List the common safety hazards for an air nailer.
- C. Describe the safety precautions for a powder actuated.
- D. Describe some typical unsafe acts using hand tools.
- E. List some inspections that should be made.
- F. Describe the proper method for cutting with a knife.

12. OPENING PROTECTION (Subpart M and X)

- A. Name the type of floor openings that must be protected.
- B. List the size of wall openings that must be guarded.
- C. Describe the proper materials and procedures to guard an opening.

13. SCAFFOLDING (Subpart L)

- A. Describe the Components and specifications for Guardrails.
- B. List four guardrail observations you should make regularly.
- C. Determine the Scaffolding loading capacity and planking spans.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

14. LADDERS (Subpart X)

- A. Name the steps for properly setting up a ladder.
- B. List the safety procedures when using a ladder.
- C. Identify the methods for taking a broken ladder out of service.
- D. Select an appropriate ladder for a job.

15. ELECTRICAL HAZARDS (Subpart K)

- A. Identify typical electrical hazards on the job site.
- B. Describe the power tool Inspection Process.
- C. Inspect extension cords for potential hazards.
- D. Test Defective electrical equipment.
- E. Define Lockout and Tagout.
- F. List some typical sources of unreleased energy.
- G. Describe the appropriate steps for locking out a piece of equipment.

16. CONFINED SPACE ENTRY (Subpart O)

- A. List common locations that are considered confined spaces.
- B. State safety procedures for confined space entry.
- C. Describe the types of gases that may be present.
- D. State the major hazards associated with confined spaces.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

17. EXCAVATION, TRENCHING AND SHORING (Subpart P)

- A. Define Excavation Terminology.
- B. Identify the daily inspection responsibilities of the competent person.
- C. Identify soil types and conditions.
- D. Interpret soil conditions and determine the slope requirements.
- E. Interpret soil conditions and determine the shoring requirements.
- F. Identify the safety requirements using a trench shield.
- G. Discuss reasons for selecting a specific type of protection.

18. RIGGING EQUIPMENT (Subpart H)

- A. Describe the inspection procedures for wire, ropes and Nylon Slings.
- B. Calculate the stress on a sling as the angle changes.
- C. Discuss the various method of lifting a load.
- D. Calculate the safe working loads on hooks.
- E. Describe the storage procedures for slings.
- F. Identify the Advantages and Disadvantages of metal and nylon.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

19. MOBILE CRANES & HOISTS (Subpart N)

- A. Perform a Daily Inspection on a Crane.
- B. Discuss the safety precautions that should be taken.
- C. Perform a Daily safety inspection..

20. WELDING EQUIPMENT AND HEALTH HAZARDS (Subpart J & D)

- A. Discuss some of the precautions you should take when welding.
- B. Describe the hazards of overhead welding.
- C. Identify the sequence you should use for using a cutting torch.
- D. Determine the ventilation requirements for confined areas.
- E. Describe the securing requirements for the bottles.
- F. Discuss the safety precautions when working in damp or wet areas.

21. FORMWORK/MASONRY (Subpart Q)

- A. Discuss some of the precautions you should take when erecting forms.
- B. Describe the hazards of formwork.
- C. Identify the sequence you should use for Formwork.
- A. Discuss some of the precautions you should take for Masonry.
- B. Describe the hazards of Masonry walls.
- C. Identify the support requirements for Masonry walls.

TOTAL CONSTRUCTION SAFETY HOURS

30

FERRIS STATE UNIVERSITY  
COLLEGE OF TECHNOLOGY  
CONSTRUCTION DEPARTMENT

COURSE: CONM 422  
DATE: March 20, 08

### COURSE OUTLINE

- COURSE TITLE:** Construction Supervision and Safety
- DESCRIPTION:** Project management practices and safety techniques used by construction supervisors to manage people, resources and safety at the construction site. Writing, behavior styles, motivation, listening styles, communication barriers, coaching, time management and meeting skills are stressed. The supervisor's responsibility *is* to recognize and abate hazards and to provide job instructional training to correct all safety hazards. *If the student attends all sessions and completes the safety activities they will earn the OSHA 30 hour Construction Safety Certificate.*
- CREDIT HOURS:** Three semester hours
- CONTACT HOURS:** Lecture - Two hours per week  
Lab - Two hours per week.
- PREREQUISITE:** CONM 222, ENGL 311, MATH 120 with a C- or better.
- TEXTBOOK:** Mangan Communications (Yearly). 29 CFR 1926 OSHA Construction Industry Regulations. Davenport, IA: MANCOMM..
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- OSHA 30-hour Construction Safety*. Brayton, Edward M. (Semester).
- Time Management Profile System, Personal Profile System, Attitudinal Listening Profile System.*

#### LEARNING OUTCOMES:

Upon completion you will be able to search the Construction Safety and Health Standards, Identify common causes of accidents and fatalities and be able to determine the abatement techniques to eliminate or reduce the hazard. Also, upon completion you will be able to perform the Human Interaction, Oral and Written Communication functions that the project manager must perform while managing the people within the construction team. Specifically, you will be able to evaluate how you manage your time, write effective meeting agendas and minutes, conduct meetings efficiently, identify your needs driven behavior style, motivate people, listen effectively, communicate, coach people, make effective presentations and train people.

STUDENT INSTRUCTIONAL UNIT DESCRIPTION AND TIME ALLOCATIONS

	UNIT DESCRIPTION	TIME LECTURE	TIME LAB
I.	Intro - Research & Presentation Criteria	1	
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V.	Motivation & Reinforcement	3	
VI.	Listening Styles	4	
VII.	Communication Barriers	3	
VIII.	Coaching & Counseling Performance	3	
IX.	Time Management	4	
X.	Evaluation Time	4	4
	OSHA Recordkeeping/inspection Procedures		4
	Safety Training Presentations		3
	Safety Observation and Abatement		19
	Final Examination - Coaching		
	Total Hours	30	30

## STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

- I. Introduction - Research & Presentation Criteria
  - A. Review the course objectives, procedures and grading policies.
  - B. Describe the research paper criteria
  - C. Discuss the Safety Research Topic
  - D. Review the Safety Presentation criteria.
  
- II. Oral and Written Communication Assignments
  - A. Write a research paper on an assigned topic.
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  - C. Present the safety topic to the class.
  
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  - A. Describe the leadership skills necessary.
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  - C. Identify the components of the minutes.
  
- IV. Needs Driven Behavior
  - A. Describe the attributes of the four Needs driven Behavioral Styles.
  - B. Identify the Fifteen Classical Patterns.
  - C. Associate the Classical Patterns with the Behavioral Styles.
  - D. Describe the Compatibility between Behavioral Styles.

## STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

- V. Motivation and Positive Reinforcement
  - A. Distinguish between motivation and hygiene factors.
  - B. Recognize and provide positive reinforcement.
  - C. List positive and negative conditions to a worker.
  
- VI. Listening Styles
  - A. Name the five listening styles.
  - B. Identify the attributes of each listening style.
  - C. Describe methods to achieve a more balanced listening style.
  
- VII. Communication Barriers
  - A. Identify the types of Communication barriers.
  - B. Review some communication cases and analyze the problems.
  - C. Neutralize listening barriers using the four step process.
  
- VIII. Coaching and Counseling People's Performance
  - A. Identify the Steps within the Performance Analysis Stage.
  - B. Describe the Performance Discussion Steps.
  
- IX. Time Management
  - A. Identify ways in which you use time effectively and ineffectively.
  - B. Analyze and evaluate how you manage your time and time wasters.
  - C. Establish goals, prioritize, plan and schedule daily and weekly.
  - D. Control paperwork, Interruptions, delegation and procrastination.
  
- X. Evaluation Time

## STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

- XI. OSHA Recordkeeping and Inspection Procedures.
  - A. List the required OSHA records that must be maintained.
  - B. Describe the site inspection process.
  - C. Define the types of violations and the penalties.
  - D. Describe the multi-employer jobsite procedures.
  - E. State the most cited physical hazards.
  - F. Describe the most injured worker group.
  
- XII. Safety Training Presentations
  - A. Evaluate Student Safety Presentations.
  
- XIII. Safety Observation and Abatement.
  - A. Recognize and eliminate unsafe acts and conditions.
  - B. Describe the safety observation steps.
  - C. Apply the safety observation system to specific areas.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

1. RECORD KEEPING (29 CFR 1904)
  - A. List the OSHA records that must be maintained.
  - B. Distinguish between a Recordable and Non-Recordable Accident.
  - C. Name the Safety Notices that must be posted at the site.
  
- 2.. INSPECTION PROCEDURES (Subpart B)
  - A. Describe the site inspection process.
  - B. Define the types of violations and the penalty.
  - C. Describe the multi employer jobsite procedures.
  
3. CONSTRUCTION SAFETY STANDARDS/ GENERAL DUTY CLAUSE
  - A. Identify the elements of the General Duty clause.
  - B. Describe the organization of the Safety Standards.
  - C. Find information in the Construction Industry OSHA Standards (CFR 1926)
  
4. SAFETY AND HEALTH PROGRAM REQUIREMENTS (Subpart C)
  - A. Describe the criteria used to evaluate the Contractors Safety Program.
  - B. List the employee training requirements.
  - C. Define the role of the competent person.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

5. HAZARD RECOGNITION AND A SAFETY OBSERVATION SYSTEMS
  - A. Recognize and eliminate unsafe acts and eliminate near misses.
  - B. Describe the steps in the Safety Observation System.
  - C. Apply the Safety Observation System to specific areas.
  
6. HAZARDOUS COMMUNICATION AND HEALTH HAZARDS (Subpart D)
  - A. List typical materials that require an MSDS..
  - B. Search the Data Sheets and find specific information.
  
7. HEALTH HAZARDS (Subpart D)
  - A. List common materials that contain asbestos.
  - B. Describe two ways that asbestos can contaminate a building.
  - C. Describe their actions if they suspect asbestos.
  - D. Determine the Noise Levels of various pieces of equipment.
  - E. Outline the key elements of a quality Hearing Protection program.
  - F. Discuss the health hazards of lead.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

8. PERSONAL AND FALL PROTECTION EQUIPMENT (Subpart E)
  - A. Identify potential fall hazards.
  - B. Determine which product to use for a specific work activity.
  - C. List proper tie off procedures.
  - D. Describe the four functional Product Categories.
  - E. Identify the proper eye protection required for specific situations.
  - F. Identify the proper respiratory equipment required for specific situations.
  
9. FIRE EXTINGUISHERS ( Subpart F)
  - A. List information needed by emergency personnel to effectively respond.
  - B. Operate a fire extinguisher properly.
  - C. Describe the Classification of Fire extinguisher.
  - D. Select the Proper Fire extinguisher for the type of fire.
  
10. MATERIAL STORAGE & Manual Lifting (Subpart H)
  - A. Explain proper storage and stacking procedures.
  - B. List the potential hazards of improperly stored materials.
  - C. List the proper steps for lifting an object.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

11. POWER & HAND TOOLS (Subpart I)
  - A. Describe tool inspection precautions you should take.
  - B. List the common safety hazards for an air nailer.
  - C. Describe the safety precautions for a powder actuated.
  - D. Describe some typical unsafe acts using hand tools.
  - E. List some inspections that should be made.
  - F. Describe the proper method for cutting with a knife.
  
12. OPENING PROTECTION (Subpart M and X)
  - A. Name the type of floor openings that must be protected.
  - B. List the size of wall openings that must be guarded.
  - C. Describe the proper materials and procedures to guard an opening.
  
13. SCAFFOLDING (Subpart L)
  - A. Describe the Components and specifications for Guardrails.
  - B. List four guardrail observations you should make regularly.
  - C. Determine the Scaffolding loading capacity and planking spans.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

14. LADDERS (Subpart X)

- A. Name the steps for properly setting up a ladder.
- B. List the safety procedures when using a ladder.
- C. Identify the methods for taking a broken ladder out of service.
- D. Select an appropriate ladder for a job.

15. ELECTRICAL HAZARDS (Subpart K)

- A. Identify typical electrical hazards on the job site.
- B. Describe the power tool Inspection Process.
- C. Inspect extension cords for potential hazards.
- D. Test Defective electrical equipment.
- E. Define Lockout and Tagout.
- F. List some typical sources of unreleased energy.
- G. Describe the appropriate steps for locking out a piece of equipment.

16. CONFINED SPACE ENTRY (Subpart O)

- A. List common locations that are considered confined spaces.
- B. State safety procedures for confined space entry.
- C. Describe the types of gases that may be present.
- D. State the major hazards associated with confined spaces.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

17. EXCAVATION, TRENCHING AND SHORING (Subpart P)

- A. Define Excavation Terminology.
- B. Identify the daily inspection responsibilities of the competent person.
- C. Identify soil types and conditions.
- D. Interpret soil conditions and determine the slope requirements.
- E. Interpret soil conditions and determine the shoring requirements.
- F. Identify the safety requirements using a trench shield.
- G. Discuss reasons for selecting a specific type of protection.

18. RIGGING EQUIPMENT (Subpart H)

- A. Describe the inspection procedures for wire, ropes and Nylon Slings.
- B. Calculate the stress on a sling as the angle changes.
- C. Discuss the various method of lifting a load.
- D. Calculate the safe working loads on hooks.
- E. Describe the storage procedures for slings.
- F. Identify the Advantages and Disadvantages of metal and nylon.

MINIMUM REQUIRED STUDENT LABORATORY ACTIVITIES DEFINED:

OSHA 30 HOUR CONSTRUCTION SAFETY PROGRAM HOURS

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT

Upon completion of each instructional unit the learner will be able to:

19. MOBILE CRANES & HOISTS (Subpart N)

- A. Perform a Daily Inspection on a Crane.
- B. Discuss the safety precautions that should be taken.
- C. Perform a Daily safety inspection..

20. WELDING EQUIPMENT AND HEALTH HAZARDS (Subpart J & D)

- A. Discuss some of the precautions you should take when welding.
- B. Describe the hazards of overhead welding.
- C. Identify the sequence you should use for using a cutting torch.
- D. Determine the ventilation requirements for confined areas.
- E. Describe the securing requirements for the bottles.
- F. Discuss the safety precautions when working in damp or wet areas.

21. FORMWORK/MASONRY (Subpart Q)

- A. Discuss some of the precautions you should take when erecting forms.
- B. Describe the hazards of formwork.
- C. Identify the sequence you should use for Formwork.
- A. Discuss some of the precautions you should take for Masonry.
- B. Describe the hazards of Masonry walls.
- C. Identify the support requirements for Masonry walls.

TOTAL CONSTRUCTION SAFETY HOURS

30

Prepared by: E. M. Brayton

MODIFY COURSE

Course Date Entry Form

FORM F
Modify Course
rev. 2/14/05

I. ACTION TO BE TAKEN: MODIFY AN EXISTING COURSE

Notes:

- 1. Complete all parts of sections I and II; complete only those items in section III that represent changes.
2. If either prefix or number are being changed, use 'Delete Course' and 'New Course' forms rather than this form.

a. List the changes to be made: Remove WIC Designation, Change Prerequisite

b. Term Effective: Semester Fall Year 2008 See instructions.

II. CURRENT: Include information that is in the current course database.

a. Course Prefix CONM b. Number 423 c. Enter Contact Hours per week in boxes or check Independent Study (X).
LECTure 3 hr/week LAB 0 hr/week INDEpendent Study [ ]
Practicum: [ ] hr/week Seminar: [ ] hr/week

d. Full Course Title: Construction Management Professional Practices

III. PROPOSED CHANGES: Complete only those boxes that represent proposed changes in the course. Leave all other spaces blank.

a. Course Prefix [ ] b. Number [ ] c. Enter Contact Hours per week in boxes or check Independent Study (X).
LECTure [ ] hr/week LAB [ ] hr/week INDEpendent Study [ ]
Practicum: [ ] hr/semester Seminar: [ ] hr/week

d. Full Course Title: [ ]

e. Abbreviated Course Title: [ ] (Abbreviate only if necessary. Use Arabic numerals. Limit to 26 characters and spaces.)

f. Semester(s) Offered: [ ] (See instructions for listing.) g. Max. Section Enrollment: [ ]

Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

h. Type: [ ] Variable [ ] Fixed i. Maximum Credit Hours [ ] j. Minimum Credit Hours [ ]

k. Grade Method: Check (x) [ ] Normal Grading [ ] Credit/No Credit only (Pass/Fail)

m. May Be Repeated for Added Credit: Check (x) [ ] Yes [ ] No

n. Levels: Check (x) [ ] Undergraduate [ ] Graduate [ ] Professional

o. CATALOG DESCRIPTION - Limit to 75 words - PLEASE BE CONCISE.

The major management issues facing construction organizations. Topics include value engineering, professional ethics, quality assurance and quality control, productivity, partnering, total quality management, risk allocation, and current management issues of timely concern to the construction industry.

p. Prerequisites: (if no prerequisites, write "None") Limited to 60 spaces. CONM 222, ENGL 311, MATH 120 with a grade of C- or better.

UCC Chair Signature/Date:

[Signature] 11/20/08

Academic Affairs Approval Signature/Date:

[Signature] 11/21/08

To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code

[ ] Basic Skill (BS) [ ] General Education (GE) [ ] Occupational Education (OC) [ ] G.E. Codes

Office of the Registrar use ONLY

Date Received: \_\_\_\_\_ Date Completed: \_\_\_\_\_ Entered: SIS [125 \_\_\_ 1D4 \_\_\_ 12R \_\_\_ 131 \_\_\_]

FORM F – CURRENT OUTLINE

FERRIS STATE UNIVERSITY  
COLLEGE OF TECHNOLOGY  
CONSTRUCTION DEPARTMENT

COURSE: CONM 423  
DATE: JULY 2005

COURSE OUTLINE

COURSE TITLE: Construction Management Professional Methods

DESCRIPTION: The major management issues facing construction organizations. Topics include value engineering, professional ethics, quality assurance and quality control, productivity, partnering, total quality management, risk allocation, and current management issues of timely concern to the construction industry. This course fulfills the General elective requirement: Writing Intensive Course.

CREDIT HOURS: Three semester hours

CONTACT HOURS: Lecture – Three hours per week

PREREQUISITE: ENGL 211 or ENGL 250, CONM 222, Math 120 with grade of C- or better.

TEXTBOOK: Beer, David, McMurrey, David (1997). *A Guide to Writing as an Engineer*. New York: John Wiley & Sons.

STUDENT LEARNING OUTCOMES: Upon completion the student will be well versed in professional ethical decision making, analyzing productivity, analyzing risk and current management issues of concern in the construction industry.

## STUDENT INSTRUCTIONAL UNIT DESCRIPTION AND TIME ALLOCATIONS

NO.	UNIT TOPIC DESCRIPTION SUMMARY	TIME LECTURE
I.	Introduction	1
II.	Professional Ethics	10
III.	Productivity Evaluation	6
IV.	Productivity Management	6
V.	Total Quality Management	4
VI.	Risk Allocation	3
VII.	Current Industry Issues	10
VIII.	Guest Speakers	2
IX.	Examinations	3
	Total Lecture Hours	45

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT Upon completion of each instructional unit the learner will be able to:	
I.	<p>Introduction &amp; Procedures</p> <ul style="list-style-type: none"> <li>A. Discuss the course objectives.</li> <li>B. Explain the Assignment Procedures.</li> </ul>
II.	<p>Professional Ethics</p> <ul style="list-style-type: none"> <li>A. Define Professional Ethics.</li> <li>B. Compare Professional Organizations Ethical Statements.</li> <li>C. Select the proper ethical conduct based upon the situation.</li> </ul>
III.	<p>Productivity Evaluation.</p> <ul style="list-style-type: none"> <li>A. Describe the importance of productivity evaluation.</li> <li>B. Identify typical problems associated with construction productivity.</li> <li>C. List the influences on productivity in construction.</li> <li>D. Explain productivity standards.</li> </ul>
IV.	<p>Productivity Management.</p> <ul style="list-style-type: none"> <li>A. Establish and use labor productivity standards.</li> <li>B. Compare the relationship of organizational structure to productivity.</li> <li>C. Identify job site organization and strategies.</li> <li>D. Describe the fundamentals of personnel management and their relationship to productivity.</li> <li>E. Explain coordination issues with project owners and designers and their impact on productivity.</li> <li>F. Conduct a project productivity evaluation.</li> </ul>

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT Upon completion of each instructional unit the learner will be able to:	
V.	<p>Total Quality Management</p> <ul style="list-style-type: none"> <li>A. Define the principles of TQM in practice.</li> <li>B. Explain management styles and philosophy.</li> <li>C. Identify the Statistical Process control charts as TQM management tools.</li> <li>D. Describe the management of TQM in a construction company.</li> </ul>
VI.	<p>Risk Allocation</p> <ul style="list-style-type: none"> <li>A. Define risk.</li> <li>B. Identify the types of risk and their probability.</li> <li>C. Explain some methods to allocate or share risk.</li> </ul>
VII.	<p>Current Industry Issues</p> <ul style="list-style-type: none"> <li>A. Research and identify current construction industry topics.</li> </ul>
VIII.	Guest Speakers
IX.	Examinations

WRITING INTENSIVE COURSE CRITERIA (Approved initially as CONM 323 by the Writing Intensive Course Committee April 24, 1996. Revised and Reapproved April 2002):

WRITING INTENSIVE  
REQUIREMENTS:

The Writing Intensive Course Committee outlines the requirements for a Writing Intensive Course (WIC). These requirements include:

- Students write the equivalent of four 3-5 page papers;
- Students receive instruction in the role of writing in professional/academic settings, strategies for determining document style, effective writing techniques for different audiences, and organizing papers for various purposes; and
- Students may write in a variety of forms, including correspondence, memoranda, proposals, reports, logs, descriptions, observations, creative writing, journals, and many other forms of course-related assignments.

As such, and in line with the topics presented in this course, the above mentioned requirements are incorporated into the assignments for the topics listed below.

Writing assignments include a research paper, article critiques, case studies, a partnering report, a specifications analysis and a QA/QC plan.

Specific writing requirements will be detailed in the instructor's course syllabus.

PREPARED BY: J. Kantorowski

FORM F – PROPOSED OUTLINE

FERRIS STATE UNIVERSITY  
COLLEGE OF TECHNOLOGY  
CONSTRUCTION DEPARTMENT

COURSE: CONM 423  
DATE: MARCH 20, 2008

COURSE OUTLINE

COURSE TITLE: Construction Management Professional Methods

DESCRIPTION: The major management issues facing construction organizations. Topics include value engineering, professional ethics, quality assurance and quality control, productivity, partnering, total quality management, risk allocation, and current management issues of timely concern to the construction industry.

CREDIT HOURS: Three semester hours

CONTACT HOURS: Lecture – Three hours per week

PREREQUISITE: CONM 222, ENGL 311, Math 120 with grade of C- or better.

TEXTBOOK: Beer, David, McMurrey, David (1997). *A Guide to Writing as an Engineer*. New York: John Wiley & Sons.

STUDENT  
LEARNING  
OUTCOMES: Upon completion the student will be well versed in professional ethical decision making, analyzing productivity, analyzing risk and current management issues of concern in the construction industry.

CONM 423 - FORM F – PROPOSED OUTLINE

STUDENT INSTRUCTIONAL UNIT DESCRIPTION AND TIME ALLOCATIONS

NO.	UNIT TOPIC DESCRIPTION SUMMARY	TIME LECTURE
I.	Introduction	1
II.	Professional Ethics	10
III.	Productivity Evaluation	6
IV.	Productivity Management	6
V.	Total Quality Management	4
VI.	Risk Allocation	3
VII.	Current Industry Issues	10
VIII.	Guest Speakers	2
IX.	Examinations	3
	Total Lecture Hours	45

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT Upon completion of each instructional unit the learner will be able to:	
I.	<p>Introduction &amp; Procedures</p> <ul style="list-style-type: none"> <li>A. Discuss the course objectives.</li> <li>B. Explain the Assignment Procedures.</li> </ul>
II.	<p>Professional Ethics</p> <ul style="list-style-type: none"> <li>A. Define Professional Ethics.</li> <li>B. Compare Professional Organizations Ethical Statements.</li> <li>C. Select the proper ethical conduct based upon the situation.</li> </ul>
III.	<p>Productivity Evaluation.</p> <ul style="list-style-type: none"> <li>A. Describe the importance of productivity evaluation.</li> <li>B. Identify typical problems associated with construction productivity.</li> <li>C. List the influences on productivity in construction.</li> <li>D. Explain productivity standards.</li> </ul>
IV.	<p>Productivity Management.</p> <ul style="list-style-type: none"> <li>A. Establish and use labor productivity standards.</li> <li>B. Compare the relationship of organizational structure to productivity.</li> <li>C. Identify job site organization and strategies.</li> <li>D. Describe the fundamentals of personnel management and their relationship to productivity.</li> <li>E. Explain coordination issues with project owners and designers and their impact on productivity.</li> <li>F. Conduct a project productivity evaluation.</li> </ul>

STUDENT OUTCOMES AND LEARNING GOALS FOR EACH UNIT Upon completion of each instructional unit the learner will be able to:	
V.	<p>Total Quality Management</p> <ul style="list-style-type: none"> <li>A. Define the principles of TQM in practice.</li> <li>B. Explain management styles and philosophy.</li> <li>C. Identify the Statistical Process control charts as TQM management tools.</li> <li>D. Describe the management of TQM in a construction company.</li> </ul>
VI.	<p>Risk Allocation</p> <ul style="list-style-type: none"> <li>A. Define risk.</li> <li>B. Identify the types of risk and their probability.</li> <li>C. Explain some methods to allocate or share risk.</li> </ul>
VII.	<p>Current Industry Issues</p> <ul style="list-style-type: none"> <li>A. Research and identify current construction industry topics.</li> </ul>
VIII.	Guest Speakers
IX.	Examinations

PREPARED BY: J. Kantorowski



Leonard Johnson/FSU  
09/19/2008 12:47 PM

To Edward Brayton/FSU@FERRIS  
Sandra L Alspach/FSU@FERRIS, Leonard  
cc Johnson/FSU@Ferris, Andrew L Purvis/FSU@FERRIS,  
Barbara A Ross/FSU@Ferris, Maureen E  
bcc  
Subject Curriculum Proposal to Add ENGL 311, Remove WIC &  
Delete STQM 260

Hi Ed

The UCC met yesterday and discussed your curriculum proposal to add ENGL 311, remove WIC and delete STQM 260.

Before we can move the proposal forward, please resubmit page two of the Form A and provide the rationale for the change as part of your proposal summary. Please make sure Genevieve West has been informed of the change (the Form B was not returned), and note that the earliest these changes can go into effect will be Spring 2009.

Finally, as your proposal to remove the WIC designation does not lie within the purview of the UCC, you will need to submit a separate proposal to the General Education Committee for that.

Please call or email should you have any questions.

Thanks,

Leonard

Leonard R. Johnson, Ph.D  
Professor  
Ferris State University  
1349 Cramer Circle  
Big Rapids, Michigan 49307  
(231) 591-2134  
<http://www.ferris.edu/education/education>



Leonard Johnson/FSU

10/16/2008 10:49 AM

To Edward Brayton/FSU@FERRIS

Sandra L Alspach/FSU@FERRIS, Leonard  
cc Johnson/FSU@Ferris, Barbara A Ross/FSU@Ferris, Andrew  
L Purvis/FSU@FERRIS, Gregory Wellman/FSU@FERRIS,

bcc

Subject Proposal to Add English 311, Remove WIC, and Delete  
STQM 260

Hi Ed

Please submit a revised Form A in which you include your rationale for the change requested in the proposal mentioned above.

Thanks

Leonard

Leonard R. Johnson, Ph.D  
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